

SOWING TULIP POPLAR SEED IS DONE WELL BY MODIFIED SAWDUST SPREADER WITH TRACTOR

*L. FRANKLIN WOOD, Superintendent,
Zanesville, Ohio, State Nursery,
Ohio Division of Forestry and Reclamation*

Sowing tulip or yellow poplar (*Liriodendron tulipifera*) seed to produce even stands has always been difficult. Hand seeding is universally used. Most nurserymen sow an amount of seed along the rows between each pair of pipe line uprights which they have found will provide uniform, desirable density. It is almost impossible to supervise the many workers needed for the job so as to insure an even stand. Usually the sowing will be excellent at first, but soon the novelty wears off and seed is thrown in bunches.

A mechanical method of sowing tulip poplar seed seemed desirable, so in the fall of 1965 we used a sawdust spreader, designed originally by Michigan State University.¹ We modified it by

¹ Bull, Ira W. Machine for Applying Sand and Sawdust to Seedbeds. U.S. Forest Serv., Tree Planters' Notes, No. 18, p. 20, Dec. 1954.

changing the shaker screen from $\frac{3}{8}$ inch size to $\frac{1}{2}$ inch. This change let the seed flow through evenly and rapidly. All seed used in the machine was 3-year stratified seed.

The spreader was hitched to a 1965 Ford 3000 tractor with live power take-off. By experimenting we found third gear at 700 r.p.m. the ideal spreading rate. This gave us a ground speed of about

1.5 miles per hour. By increasing or decreasing the tractor speed the spreading rate could be varied.

With this new method, all seeding, mulching, and shading of the beds were completed in 1.5 days as compared to 3 days with the standard method. Labor needed for seeding was reduced by 90 percent (from 30 men to only 3). An excellent, even stand of tulip poplar resulted the following spring.